ABSTRACT

The present invention relates to methods for broad spectrum prevention and treatment of viral respiratory infection. In particular, the present invention relates to methods for preventing, treating or ameliorating symptoms associated with respiratory syncytial virus (RSV), parainfluenza virus (PIV), and/or human metapneumovirus (hMPV) infection, the methods comprising administering to a subject an effective amount of one or more anti-RSV-antigen antibodies or antigen-binding fragments thereof, one or more anti-hMPV-antigen antibodies or antigen-binding fragments thereof, and/or one or more anti-PIV-antigen antibodies or antigen-binding fragments thereof. In certain embodiments, a certain serum titer of the anti-RSV-antigen antibodies, anti-PIV-antigen antibodies, and/or anti-hMPV-antigen antibodies or antigen-binding fragments thereof is achieved in said subject. In certain specific embodiments, the subject is human and, preferably, the anti-RSV-antigen antibody, anti-PIV-antigen antibody, and/or anti-hMPV-antigen antibodies are human or humanized. The present invention relates further to compositions comprising the anti-RSV-antigen antibodies, anti-PIV-antigen antibodies, and/or anti-hMPV-antigen antibodies or antigen-binding fragments thereof. The present invention also relates to detectable or diagnostic compositions comprising the one or more anti-RSV-antigen antibodies, anti-PIV-antigen antibodies, and/or anti-hMPV-antigen antibodies or antigen-binding fragments thereof and methods for detecting or diagnosing RSV, PIV and/or hMPV infection utilizing the compositions.